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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/804,621	03/12/2001	Serge Willenegger	PA363DIVC1	3167
23696 7590 01/07/2008 QUALCOMM INCORPORATED 5775 MOREHOUSE DR. SAN DIEGO, CA 92121			EXAMINER WILSON, ROBERT W	
			ART UNIT	PAPER NUMBER
			2619	
			NOTIFICATION DATE	DELIVERY MODE
			01/07/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

09/804,621

Applicant(s)

WILLENEGGER ET AL.

Examiner

Robert W. Wilson

Art Unit

2619

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14 and 17-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14 & 17-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 9/18/07 & 3/12/01.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application
- ☐ Other: _____.

Claim Rejections - 35 USC § 103

1. Claims 14 & 17-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walton (U.S. Patent No: 5,621,723) further in view of Raith (U.S. Patent No.: 5,930,706)

Referring to claim 14, Walton teaches: a method in a base station (Base Station per col. 6 line 45 to col. 7 lines 20)

Receiving a reverse link signal from a remote station wherein said reverse link signal comprises a plurality of subchannels (The base station receives reverse channel slot signals or subchannels per col. 3 lines 56 to 60 from a remote station er col. 3 line 15 line 67 and per col. 6 lines 45 to 67)

Adjusting independently transmit power of one or more of said plurality of subchannel signals by generating a power control message for adjusting the transmit power of at least one of said plurality of subchannel signals (The base station sends power control bits or power control message based upon the comparison per col. 6 lines 45 to 67) and

Comparing a frame error rate of each of said subchannel signals with a frame error rate threshold for said generating said power control message (The base station compares the power to at least one threshold for the subchannel per col. 6 lines 45 to 67)

Walton does not expressly call for: Frame Error Rate

Raith teaches frame error rate can be substituted in place of received signal strength (RSS) per col. 18 lines 28 to 49.

It would have been obvious to one of ordinary skill in the art at the time of the invention add FER of Raith in place of measuring signal power of Walton because both FER and signal power are quality measurements which can be utilized to determine the deterioration of a channel

Referring to claim 18, the combination of Walton and Raith teach: the method as recited in claim 14 and Walton teaches further comprising generating a plurality of quality threshold values corresponding to said plurality of subchannel in accordance with measured power for each of said subchannel signals per col. 3 line 16 to col. 4 line 45 and per col. 6 line 46 to col. 7 line 20

Walton does not expressly call for: Frame Error Rate

Raith teaches frame error rate can be substituted in place of received signal strength (RSS) per col. 18 lines 28 to 49.

It would have been obvious to one of ordinary skill in the art at the time of the invention add FER of Raith in place of measuring signal power of Walton because both FER and signal power are quality measurements which can be utilized to determine the deterioration of a channel.

In addition Walton teaches.

Regarding claim 19, generating a plurality of gain values and applying each gain value to one of said plurality of signal to adjust the transmit power of said subchannel signals (plurality of bits wherein each bit inherently corresponds to a command to increase or decrease the transmit of the transmit power of one of the subchannels by a predetermined amount col. 6 lines 45 to 67.

Referring to claim 20, the combination of Walton and Raith teach: the method as recited in claim 14 and Walton teaches: further comprising decoding each of said corresponding subchannel signals and determining frame error in said subchannel signals (The base station has inherent decoder for decoding corresponding subchannels and determining the signals power per col. 3 line 16 to col. 4 line 45 and per col. 6 line 46 to col. 7 line 20)

Walton does not expressly call for: Frame Error Rate

Raith teaches frame error rate can be substituted in place of received signal strength (RSS) per col. 18 lines 28 to 49.

It would have been obvious to one of ordinary skill in the art at the time of the invention add FER of Raith in place of measuring signal power of Walton because both FER and signal power are quality measurements which can be utilized to determine the deterioration of a channel

Referring to claim 21, Walton teaches: An apparatus for wireless communication (Base Station per col. 6 line 45 to col. 7 lines 20)

A receiver configured to receive a reverse link signal that comprises a plurality of subchannel signals (The base station has an inherent receiver which receives at least two reverse channel slot signals or subchannels and measures the power per col. 3 line 15 line 67 and per col. 6 lines 45 to 67)

A threshold generator configured to provide a frame error rate threshold for at least one of the subchannels (The base station generates a threshold for measuring the power from a subchannel per col. 6 lines 45 to 67)

A comparator configured to compare a frame error rate of at least one of the subchannel with a threshold for that subchannel signal (The base station compares the power to at least one threshold for the subchannel per col. 6 lines 45 to 67)

A message generator configured to adjust independently transmit power of one or more of the plurality of subchannel signals by generating a power control message based on the comparison

(The base station sends power control bits or power control message based upon the comparison per col. 6 lines 45 to 67)

Referring to claim 22 the combination of Walton and Raith teach: the method as recited in claim 22 and Walton teaches a message generator is configured to generate a plurality of quality threshold values corresponding to the plurality of subchannel in accordance with a measured signal power for each subchannel per col. 3 line 16 to col. 4 line 45 and per col. 6 line 46 to col. 7 line 20

Walton does not expressly call for: Frame Error Rate

Raith teaches frame error rate can be substituted in place of received signal strength (RSS) per col. 18 lines 28 to 49.

It would have been obvious to one of ordinary skill in the art at the time of the invention add FER of Raith in place of measuring signal power of Walton because both FER and signal power are quality measurements which can be utilized to determine the deterioration of a channel.

In addition Walton teaches:

Regarding claim 23, wherein the message generator is configured to generate at least a plurality of bits wherein each bit inherently corresponds to a command to increase or decrease the transmit of the transmit power of one of the subchannels by a predetermined amount col. 6 lines 45 to 67.

Referring to claim 24, the combination of Walton and Raith teach: The apparatus for wireless communication of claim 21, Walton teaches: further comprising a decoder configured to decode each of the subchannel signal from the received reverse link signal (The base station has inherent decoder to decode the received reverse link signals per col. 6 lines 45 to 67 and wherein the comparator is configured to calculated the reverse link received power per col. 6 lines 45 to 67

Raith teaches: Frame Error Rate (Frame Error Rate can be substituted for power measurement or channel quality measurement

It would have been obvious to one of ordinary skill in the art at the time of the invention add FER of Raith in place of measuring signal power of Walton because both FER and signal power are quality measurements which can be utilized to determine the deterioration of a channel.

Referring to claim 25, Walton teaches: An apparatus for wireless communication (Base Station per col. 6 line 45 to col. 7 lines 20)

means for receiving a reverse link signal that comprises a plurality of subchannel signals (The base station has an inherent receiver or means which receives at least two reverse channel slot

signals or subchannels and measures the power per col. 3 line 15 line 67 and per col. 6 lines 45 to 67)

means for providing a frame error rate threshold for at least one of the subchannel signals (The base station has a measure for measuring the power from a subchannel relative to a threshold or means per col. 6 lines 45 to 67)

means for comparing a frame error rate of at least one of the subchannel signals with the rhesold for that subchannel signal (The base station compares the power to at least one threshold for the subchannel or means per col. 6 lines 45 to 67)

means for adjusting independently transmit power of one or more of the plurality of subchannel signals by generating a power control message based on the comparison (The base station sends power control bits or power control message based upon the comparison for independently adjusting the power on one ore more of the plurality of subchannels or means per col. 6 lines 45 to 67)

Walton does not expressly call for: Frame Error Rate

Raith teaches frame error rate can be substituted in place of received signal strength (RSS) per col. 18 lines 28 to 49.

It would have been obvious to one of ordinary skill in the art at the time of the invention add FER of Raith in place of measuring signal power of Walton because both FER and signal power are quality measurements which can be utilized to determine the deterioration of a channel.

Referring to claim 26 the combination of Walton and Raith teach: the apparatus for wireless communication of claim 26 and Walton further comprising means for generating a plurality of quality threshold values corresponding to the plurality of subchannel in accordance with the measured signal power for each of the subchannel signals per col. 3 line 16 to col. 4 line 45 and per col. 6 line 46 to col. 7 line 20

Walton does not expressly call for: Frame Error Rate

Raith teaches frame error rate can be substituted in place of received signal strength (RSS) per col. 18 lines 28 to 49.

It would have been obvious to one of ordinary skill in the art at the time of the invention add FER of Raith in place of measuring signal power of Walton because both FER and signal power are quality measurements which can be utilized to determine the deterioration of a channel.

In addition Walton teaches:

Regarding claim 27, further comprising means for generating at least a plurality of bits inherently corresponds to a command to increase or decrease the transmit power of one of the subchannels by a predetermined amount col. 6 lines 45 to 67.

Referring to claim 28, the combination of Walton and Raith teaches: The apparatus for wireless communication of claim 26, Walton teaches: further comprising a means for decoding each of the subchannel signals from the received reverse link signal and means for calculating the signal power in each of the subchannel signals (The base station has inherent decoder or means to decode the received reverse link signals per col. 6 lines 45 to 67 and wherein the comparator or means is configured to calculate the reverse link received power per col. 6 lines 45 to 67

Walton does not expressly call for: Frame Error Rate

Raith teaches frame error rate can be substituted in place of received signal strength (RSS) per col. 18 lines 28 to 49.

It would have been obvious to one of ordinary skill in the art at the time of the invention add FER of Raith in place of measuring signal power of Walton because both FER and signal power are quality measurements which can be utilized to determine the deterioration of a channel.

Referring to claim 29, Walton teaches: A Base station (Base Station per col. 6 line 45 to col. 7 lines 20) comprising

An antenna (Base Station per Figures 1 and Figures 2 has inherent antenna)

A receiver configured to receive a reverse link signal that comprises a plurality of subchannel signals (The base station has an inherent receiver which receives at least two reverse channel slot signals or subchannels and measures the power per col. 3 line 15 line 67 and per col. 6 lines 45 to 67)

A threshold generator configured to provide a frame error rate threshold for at least one of the subchannels (The base station generates a threshold for measuring the power from a subchannel per col. 6 lines 45 to 67)

A comparator configured to compare a frame error rate of at least one of the subchannel with a threshold for that subchannel signal (The base station compares the power to at least one threshold for the subchannel per col. 6 lines 45 to 67)

A message generator configured to adjust independently transmit power of one or more of the plurality of subchannel signals by generating a power control message based on the comparison (The base station sends power control bits or power control message based upon the comparison per col. 6 lines 45 to 67)

Walton does not expressly call for: Frame Error Rate

Raith teaches frame error rate can be substituted in place of received signal strength (RSS) per col. 18 lines 28 to 49.

It would have been obvious to one of ordinary skill in the art at the time of the invention to add FER of Raith in place of the measuring signal power of Walton because both FER and signal power are quality measurements which be utilized to determine the determination of a channel or subchannel.

Response to Amendment

2. Applicant's arguments filed 11/5/07 have been fully considered but they are not persuasive.

The examiner respectfully disagrees with the applicant argument that the reference Walton does not disclose: receiving a reverse link signal from a remote station, wherein said reverse link signal comprises a plurality of subchannel signals

Walton teaches: receiving a reverse link signal from a remote station, wherein said reverse link signal comprises a plurality of subchannel signals (The base station receives a channel from mobile station which has slots or subchannels per col. 3 lines 56 to 60. Please note that the reverse link channel has been divided upon into slots which the examiner has interpreted as subchannels)

The examiner respectfully disagrees with the applicant argument that Walton does not disclose: individually adjusting the power level of at least one of several subchannels in a reverse link signal from a remote station.

Walton teaches: individually adjusting the power level of at least one of several subchannels in a reverse link signal from a remote station (16 Power control group slots each contain the power control level in bits which are used to adjust the power level of a channel with slots per col. 6 lines 47 to col. 7 line 18 and per col. 3 lines 56 to 60)

The examiner respectfully disagrees with the applicant argument that the combination of references do not disclose: comparing error rate to threshold for generating a power control message

Walton teaches: comparing a power level to a threshold for generating a power control message per col. 6 lines 45 to col. 7 line 20.

Walton does not expressly call for: Frame Error Rate

Raith teaches frame error rate can be substituted in place of received signal strength (RSS) per col. 18 lines 28 to 49.

It would have been obvious to one of ordinary skill in the art at the time of the invention to add FER of Raith in place of the measuring signal power of Walton because both FER and signal power are quality measurements which be utilized to determine the determination of a channel or subchannel.

The examiner respectfully disagrees with the applicant's argument that Walton does not teach: measuring of power on a plurality of subchannels and comparing the value against a threshold. Walton teaches measuring power on a plurality slots within the reverse link by the base station or subchannels relative to a plurality of thresholds per col. 3 line 15 line 67 and per col. 6 lines 45 to 67.

Walton does not expressly call for: Frame Error Rate.

Raith teaches: Frame Error Rate (Frame Error Rate can be substituted for power measurement or channel quality measurement per 18 lines 28 to 49.)

It would have been obvious to one of ordinary skill in the art at the time of the invention add FER of Raith in place of measuring signal power of Walton because both FER and signal power

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

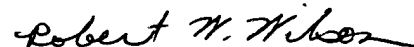
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert W. Wilson whose telephone number is 571/272-3075. The examiner can normally be reached on M-F (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edan Orgad can be reached on 571/272-7884. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Robert W Wilson
Examiner
Art Unit 2619

RWW
12/27/07